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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,149	09/09/2003	Yoshiyuki Takata	Q77409	1892
23373	7590	09/09/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ASHTON, ROSEMARY E	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,149

Applicant(s)

TAKATA ET AL.

Examiner

Rosemary E. Ashton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 10 is/are rejected.
- 7) ☒ Claim(s) 2 and 4-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/23/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Claim 1 is generic to a plurality of disclosed patentably distinct species comprising Formula (VIa) or (VIb). Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Howard Bernstein on February 4, 2005 a provisional election was made without traverse to prosecute the invention of **Formula (VIa)** in claim 1. Mr. Bernstein requested the Examiner determine the elected species. The Examiner chose the first compound having Formula (VIa). Affirmation of this election must be made by applicant in replying to this Office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

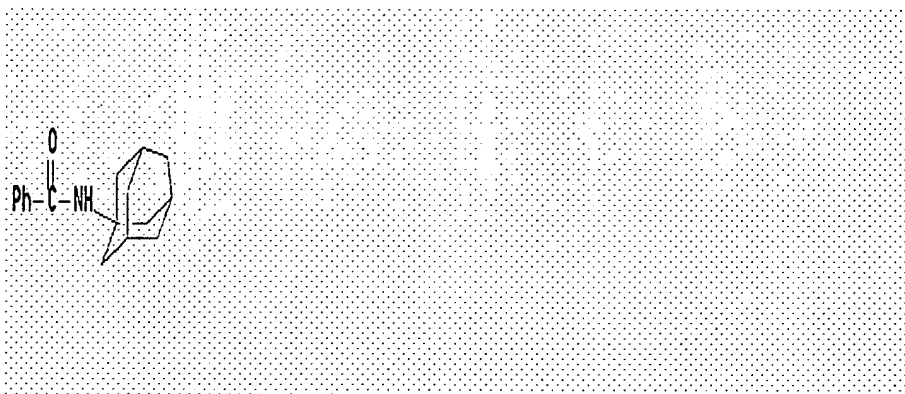
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

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examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1,3,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-092681 published 4/7/95, see Caplus abstract DN 124:131526 in view of Kinoshita et al. patent no. 6,479,210.

As shown in the abstract JP '681 teaches a positive chemically amplified resist composition comprising (A) a photo-acid generating compound, (B) a polymer having an acid labile group and (C) a carboxamide (CONH₂) compound. The carboxamide compound, adamantane carboxylic acid anilide, (section 127) ,shown below, meets the limitations of formula (VIa) when X is a single bond, A is an alicyclic adamantly group and R₁₄ is an aromatic hydrocarbon. The examples, teach the resist compositions also have a fluorochemical surfactant as in claim 10.



The English translation example 2 in section 142 teaches a resist comprising the compound above (example 12 in Table 2) and the photoacid generator triphenylsulfonium triflate (trifluoromethanesulfonate) and does not have one of the compounds having formulas I and Va-Vc.

Kinoshita teaches a positive chemically amplified photoresist composition wherein the photoacid generator is either triphenylsulfonium triflate or triphenylsulfonium phenylsulfonate (col. 5, lines 61-67 shown below.

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(i) Sulfonium Salt Compounds

Triphenylsulfonium methanesulfonate, triphenylsulfonium trifluoromethanesulfonate, triphenylsulfonium propionate, triphenylsulfonium hexafluoropropanesulfonate, triphenylsulfonium nonafluorobutanesulfonate, triphenylsulfonium phenylsulfonate, triphenylsulfonium

It would have been obvious to one of ordinary skill in the art to use triphenylsulfonium phenylsulfonate as the photoacid generator in the invention of JP '681 with a reasonable expectation of obtaining a photoresist composition for exposure to KrF excimer laser light irradiation because Kinoshita teaches either triphenylsulfonium triflate or triphenylsulfonium phenylsulfonate may be used as the photoacid generator in a positive chemically amplified photoresist composition with exposure to KrF excimer laser light irradiation.

Allowable Subject Matter

6. Claims 2,4-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach the amount of reagents in the photoresist, the amount of monomers and type of monomers in the polymer and other compounds having formula VIa.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosemary E. Ashton whose telephone number is 571-272-1326. The examiner works a part-time work schedule and can normally be reached M-F between 11:30 am – 5:30 pm.

If multiple attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached at 571-272-1526.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rea
February 6, 2005



Rosemary E. Ashton
Primary Examiner
Art Unit 1752

**ROSEMARY ASHTON
PRIMARY EXAMINER**